

Notice of Allowability

Application No.

09/939,145

Examiner

Christopher M. Keehan

Applicant(s)

QIU ET AL.

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the application filed 8/24/01.
2. ☒ The allowed claim(s) is/are 1-17.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☒ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 4/14/03
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Jian Zhou on July 20, 2004.

The application has been amended as follows: on page 1, line 6 of the specification, --**Cross-Reference to Related Application**

This application claims the benefit of provisional application 60/228,022, filed August 24, 2000.-- has been inserted.

In claim 5, "any one of claims 1 to 4" has been replaced with --claim 1--.

In claim 6, "any one of claims 1 to 5" has been replaced with --claim 1--.

In claim 7, "any one of claims 1 to 6" has been replaced with --claim 1--.

In claim 9, "any one of claims 1 to 8" has been replaced with --claim 1--.

In claim 10, "any one of claims 1 to 9" has been replaced with --claim 1--.

In claim 11, "any one of claims 1 to 10" has been replaced with --claim 1--.

In claim 13, "claims 11 or 12" has been replaced with --claim 12--.

In claim 14, "any one of claims 1 to 13" has been replaced with --claim 1--.

In the Abstract, delete the current Abstract and replace with the following:

-The invention relates to a process for coating a material surface, comprising the steps of: (a) applying to the material surface a tie layer comprising a polyionic material; (b) covalently binding a bifunctional compound comprising an ethylenically unsaturated double bond to the tie layer; and (c) graft polymerizing a hydrophilic monomer onto the compound comprising the ethylenically unsaturated double bond. The coated articles that are obtainable by the process of the invention have desirable characteristics regarding adherences to the substrate, durability, hydrophilicity, wettability, biocompatibility and permeability and are thus useful for the manufacture of biomedical articles such as ophthalmic devices.--.

The following is an examiner's statement of reasons for allowance: a reasonable search of the prior art failed to reveal the limitations as set forth in claim 1. Winterton et al. (WO 99/35520) disclose coating a substrate with a polycationic material, and repeating this coating step, which could meet the limitation of step (b). Winterton et al. do not teach or disclose step (c), graft polymerizing a hydrophilic monomer onto the layer produced in step (b). Chabreck et al. (5,527,925) disclose coating a substrate comprising covalently bonded initiator molecules to a substrate that has been functionalized by plasma treatment, and then graft polymerizing a hydrophilic macromonomer of ethylenic unsaturation to this layer. Chabreck et al. do not teach or disclose applying a layer comprising a polyionic material to the substrate.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M. Keehan whose telephone number is (571) 272-1087. The examiner can normally be reached on Monday-Friday, from 6:30 to 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy P. Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christopher Keehan

July 20, 2004


DAVID J. BUTTNER
PRIMARY EXAMINER

